

**REMARKS**

Claims 21-37, 40, 42, 43, 46, 48, and 50-62 are the claims currently examined in the application. Claims 1-20, 38, 39, 41, 44-47 and 49 have been withdrawn. By this Amendment, Applicant is amending claims 21-37, 40, 42, 43, 48, 50, and 53-62. No new matter is added.

Applicant thanks the Examiner for considering the declaration filed September 9, 2003. Applicant also thanks the Examiner for considering the Information Disclosure Statements filed on September 9, 2003 and December 24, 2003.

Applicant also thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

**§112, Second Paragraph Rejections**

1. *Claims 24, 40, 42, 43, 48, 50-62 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

The informalities noted by the Examiner have been corrected, with the rejection of claims 51 and 52 being cured by amendments to the claims upon which they depend. Thus, withdrawal of the rejection is respectfully requested.

**§103(a) Rejections**

2. *Claims 21-37, 40, and 46 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tsuchi (U.S. 6,567,327).*

In addition “[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP §2142. Section 2142 further states that “[t]he initial burden is on the examiner to provide some suggestion of desirability of doing what the inventor has done.”

Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. *In re Kotzab*, 55 USPQ2d at 1316-1317 (citing *B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996)); see also MPEP § 2142 (quoting *Ex parte Clapp*, 227 USPQ 972, 973 (B. Pat. App. & Inter. 1985)) (“To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.”).

Applicants respectfully submit that the current grounds of rejection do not satisfy the above criteria for demonstrating that the claimed invention would have been obvious in view of a modification of the applied reference. Claim 21 recites a “switch circuit including at least one transistor which has a threshold value higher than that of the transistor having relatively low threshold value” as one of the elements of the respective claims. The Examiner acknowledges

that this element is not shown in the applied reference and argues that the addition of one transistor with a threshold value greater than that of the transistor having relatively low threshold value is obvious to one skilled in the art. The Examiner provides no specificity as to why this modification would be obvious, nor does the Examiner make particular findings stating that the modification is obvious. As such, the motivation to combine the applied reference with the missing element, the higher threshold value transistor, is missing. The rejection appears to be based on the use of improper hindsight to reconstruct the present invention using Applicant's disclosure as a roadmap. Thus, claim 21 is patentable over the prior reference.

The grounds of rejection also fail to show where in the disclosure of these references there is an actual suggestion or motivation for the alleged modification. *In re Mills* 916 F.2d 680, 682 (Fed. Cir. 1990). Tsuchi shows the use of switches to turn the differential circuits on and off, but does not make any statements as to how the switches should be constructed. The present invention requires a "switch circuit including at least one transistor which has a threshold value higher than that of the transistors having relatively low threshold value." The higher threshold value is necessary to the invention in order to solve the problem of power consumption due to the leakage current. A circuit with all low threshold values will suffer a large amount of power consumption from the leakage current. The addition of a transistor with a threshold value higher than that of the transistors having relatively low threshold value prevents the power consumption from the leakage current. Tsuchi teaches the use of a precharge/predischarge circuit to prevent unnecessary power consumption. This is not the same as a transistor, and there is no suggestion to replace the circuit with a transistor. As Tsuchi does not show a suggestion or

motivation to modify the reference, it cannot render claim 21 obvious. Claim 21 is patentable over the applied art.

Claims 22, 23, 40, and 46 are at least patentable by virtue of their dependency from claim 21.

Claim 24 is patentable for reasons similar to claim 21. Claim 24 recites a “a first switch circuit for controlling an activation and deactivation of said differential stage, wherein said first switch circuit comprises a transistor connected in series with said current source between said differential pair and a second power supply, having a threshold value higher than that of the transistor having relatively low threshold value and including a control terminal for receiving a control signal to be controlled to be on and off, or said first switch circuit is constituted by said current source comprised of a transistor having a threshold value higher than that of the transistors having relatively low threshold value and including a control terminal for receiving a control signal to be controlled to be on and off.” Tsuchi does not disclose all the elements from claim 24, as evidenced by the Examiner’s acknowledgement that Tsuchi fails to expressly disclose this feature. The Examiner again states that the missing element from the disclosure would be obvious to one skilled in the art. Applying a similar argument made in regard to claim 21, Claim 24 is patentable over the applied reference.

Claims 26-28 are patentable at least by virtue of their dependency from claim 24.

Claim 25 contains similar claim language as does claim 24. Claim 25 is patentable for the same reasons as claim 24.

Claim 29 contains similar language to claims 21, 24, and 25 regarding the transistor threshold values. The Examiner makes the same obviousness argument here as above. Claim 29 is patentable for the same reasons as claims 21, 24, and 25.

Claims 30-34 are patentable at least by virtue of their dependency on claim 29.

Claim 36 is patentable for the same reasons as claims 21, 24, 25, and 29. Claim 37 is patentable at least by virtue of its dependency on claim 36.

The Examiner does not list an argument as to why claim 35 is unpatentable over Tsuchi, even though it is listed as being such in the Office Action. Even as such, claim 35 is allowable over the applied reference for reasons similar to that for claims 21, 24, 25, and 29.

3. *Claim 35 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Horie et al. (U.S. 6,054,876).*

The rejection of claim 35 over Horie suffers from the same inadequacies as the rejections of claims 21, 24, 25, and 29 over Tsuchi. The Examiner acknowledges that Horie does not teach a transistor having a threshold value higher than that of the transistor having relatively low threshold value. Additionally, the Examiner argues that the addition of this element to Horie is obvious to one skilled in the art. As noted in the arguments above, the Examiner's arguments do not meet the necessary criteria for rejection as stated by both the MPEP and the Federal Circuit. Therefore, claim 35 is patentable over the applied reference.

4. *Claims 42, 43, 48, and 50-62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Tsuchi or Horie in further view of Arai et al (U.S. 5,644,146).*

Arai does not make up the deficiencies of Tsuchi and Horie with regard to claim 21, from which claims 42, 43, 48 and 50-51 depend. Arai discloses a thin film transistor with a double gate and offset structure for allegedly improving threshold voltage control and drain voltage and drain current characteristics. Nothing in Arai taken individually or in combination with Tsuchi and Horie suggest a switch circuit with a high threshold transistor and lower threshold transistors for helping to prevent leakage current.

In order for a combination of references to render a claimed invention obvious, all elements of the claimed invention must be taught or disclosed. Since claims 42, 43, 48 and 50-52 depend upon claim 21 and since Arai does not cure the deficient teachings of Tsuchi with respect to claim 21, claims 42, 43, 48, and 50-52 are patentable at least by virtue of their dependency.

Since claims 53 and 54 depend upon claim 24 and since Arai does not cure the deficient teachings of Tsuchi with respect to claim 24, claims 53 and 54 are patentable at least by virtue of their dependency.

Since claims 55 and 56 depend upon claim 25 and since Arai does not cure the deficient teachings of Tsuchi with respect to claim 25, claims 55 and 56 are patentable at least by virtue of their dependency.

Since claims 57 and 58 depend upon claim 29 and since Arai does not cure the deficient teachings of Tsuchi with respect to claim 29, claims 57 and 58 are patentable at least by virtue of their dependency.

Since claims 59 and 60 depend upon claim 35 and since Arai does not cure the deficient teachings of Horie with respect to claim 35, claims 59 and 60 are patentable at least by virtue of their dependency.


Since claims 61 and 62 depend upon claim 36 and since Arai does not cure the deficient teachings of Tsuchi with respect to claims 36, claims 61 and 62 are patentable at least by virtue of their dependency.

**Conclusion**

5. In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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